

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP 2004/14992**A. CLASSIFICATION OF SUBJECT MATTER**Int.Cl⁷ C02F11/00, C10J3/00, F02M21/02, F02B43/08, F02C3/28, F02C6/18, F23G5/027, F23G5/04, F23G5/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C02F11/00, C10J3/00, F02M21/02, F02B43/08, F02C3/28, F02C6/18, F23G5/027, F23G5/04, F23G5/46

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2005, Japanese Registered Utility Model Gazette 1994-2005, Japanese Gazette Containing the Utility Model 1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 10-2543 A (EBARA CORPORATION) 06.01.1998 claim 1, 14; Fig. 1 (FAMILY: NONE)	8, 17
Y		9-16, 18-22
Y	JP 2002-256884 A (TSUKISHIMA KIKAI CO., LTD.) 11.09.2002, claim 1-5; column 3, line 42 paragraph [0013], [0015]; column 5, lines 18-24 (FAMILY: NONE)	1-7, 9-16 18-22
Y	JP 11-82975 A (OKAWARA MGF. CO., LTD.) 26.03.1999 claim 1, 2; Fig. 1 (FAMILY: NONE)	1, 4-7, 9-16 18-22
Y	JP 2002-372215 A (TSUKISHIMA KIKAI CO., LTD.) 26.12.2002, claim 1 (FAMILY: NONE)	1, 4-7, 9-16 18-22
Y	JP 54-96864 A (TAKASAGO Thermal Engineering CO., LTD.) 31.07.1979, claim (FAMILY: NONE)	2, 3, 11-13, 20



Further documents are listed in the continuation of Box C.



See patent family annex.

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Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17.01.2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2003-253274 A (MITSUI Engineering & Shipbuilding CO., LTD.) 10.09.2003, paragraph [0026] (FAMILY; NONE)	6, 7, 15, 16, 21 , 22